

What is claimed is:

1. An optical module, comprising:

a package having a CAN-type shape, said package including a stem, a sub-mount having a mounting surface and a plurality of lead
5 terminals, said sub-mount and said lead terminal being provided in said stem, said mounting surface substantially perpendicular to said stem;
a thermoelectric device disposed on said sub-mount; and
a light-emitting device mounted on said thermoelectric device.

10 2. The optical module according to claim 1, wherein
said plurality of lead terminals are co-axially disposed so as to surround said sub-mount, and

said module further comprises an extension member fixed to one lead terminal disposed behind said sub-mount and electrically connected
15 to said thermoelectric device disposed on a front of said sub-mount.

3. The optical module according to claim 2, wherein
said extension member has a side fixed to said lead terminal
disposed behind said sub-mount such that said extension member detours
20 around a side surface of said sub-mount.

4. The optical module according to claim 3, wherein
said extension member is an L-shaped metallic component having
two sides and an elbow portion between said two sides, one side of said
25 two sides is fixed to said lead terminals and the other of said two sides is electrically connected to said thermoelectric device with a bonding wire.

5. The optical module according to claim 3, wherein

said extension member is a U-shaped metallic component having two outer sides, an inner side and two elbow portions between said outer side and said inner side, one of outer sides being fixed to said lead terminal and the other of said outer sides being electrically connected to said thermoelectric device with a bonding wire, said inner side detouring around a side surface of said sub-mount.

6. The optical module according to claim 3, wherein

said extension member is a U-shaped metallic component having two outer sides, an inner side and two elbow portions connecting said outer side and said inner side, said inner side being fixed to said lead terminal and said two outer sides sandwiching said lead terminal therebetween, one of said two outer sides detouring around a side surface of said sub-mount and being electrically connected to said thermoelectric device with a bonding wire.

7. The optical module according to claim 2, wherein

said extension member has a side fixed to said lead terminal disposed behind said sub-mount such that said extension member detours around a top surface of said sub-mount.

8. The optical module according to claim 7, wherein

said extension member is an L-shaped metallic component having two sides and one elbow portion, one of said two sides being fixed to said

lead terminal, the other of said two sides detouring around said sub-mount and being electrically connected to said thermoelectric device with a bonding wire.

5 9. The optical module according to claim 2, wherein

 said extension member is a U-shaped metallic component having to outer sides, one inner side and two elbow portions connecting said two outer sides and said inner side to each other, one of said two outer sides being fixed to said lead terminal and the other of said two outer sides
10 being electrically connected to said thermoelectric device with a bonding wire, said inner side detouring around said top surface of said sub-mount.

 10. The optical module according to claim 2, wherein

 said extension member has a hollow so as to fix said lead terminal
15 thereto with solder

 11. The optical module according to claim 10, wherein

 said extension member has a groove for receiving excess solder.